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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,171	11/14/2003	Kazunori Yoshino	03-227	2919
7590 01/24/2005			EXAMINER	
Michael B. McNeil Liell & McNeil Attorneys PC P.O. Box 2417 Bloomington, IN 47402			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/714,171	Applicant(s) YOSHINO, KAZUNORI	
	Examiner F. Daniel Lopez	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/03</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7-10, 15 and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Maruta et al (see discussion below).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2, 6, 11-14 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Maruta et al in view of Japan 2002-195218. Maruta et al discloses a power system and method of using the power system comprising a hydraulic cylinder (7) having first (connected to 6b) and second volumes separated from each other by a movable plunger, and fluidly connected to a hydraulic pump (2) powered by an electric motor (24, fig 3 or 5); a variable displacement hydraulic motor (18) fluidly connected to the first volume and powering a generator (19), wherein a power storage system (20) couples (via 28, 23, fig 3 or 5) the generator to the electric motor; but does not disclose that the power storage system includes a fuel cell, an electrolysis device and a hydrogen storage device; wherein the method includes the steps of producing hydrogen

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and oxygen within the electrolysis device from electrical power generated by the generator, absorbing the hydrogen in a hydrogen storage device and generating electrical power by combining the hydrogen with oxygen in the fuel cell; with a further step of producing hydrogen in a reformer.

Japan 2002-195218 teaches, for a power system and method of using the power system comprising a hydraulic cylinder (2) having first (e.g.6) and second volumes separated from each other by a movable plunger (7), and fluidly connected to a hydraulic pump (3) powered by an electric motor (42); a hydraulic motor (49) fluidly connected to the first volume and powering a generator (50), wherein a power storage system (43) couples the generator to the electric motor ; that the power storage system includes a fuel cell (46), an electrolysis device (44) and a hydrogen storage device (45); wherein the method includes the steps of producing hydrogen and oxygen within the electrolysis device from electrical power generated by the generator, absorbing the hydrogen in a hydrogen storage device and generating electrical power by combining the hydrogen with oxygen in the fuel cell; with a further step of producing hydrogen in a reformer (52).

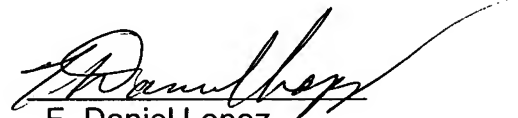
Since the power storage systems of Maruta et al and Japan 2002-195218 are functionally equivalent in the regenerative energy art, it would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the power storage system of Maruta et al with a power storage system that includes a fuel cell, an electrolysis device and a hydrogen storage device; wherein the method includes the steps of producing hydrogen and oxygen within the electrolysis device from electrical power generated by the generator, absorbing the hydrogen in a hydrogen storage device and generating electrical power by combining the hydrogen with oxygen in the fuel cell; with a further step of producing hydrogen in a reformer, as taught by Japan 2002-195218, as a matter of engineering expediency.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', with a long, sweeping horizontal line extending to the right.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
January 21, 2005